

# PATENT SPECIFICATION



Application Date: Jan. 9, 1923. No. 730/23. **210,259**

Complete Left: Oct. 9, 1923.

Complete Accepted: Jan. 31, 1924.

## PROVISIONAL SPECIFICATION.

### A New or Improved Letter File.

We, CUTHBERT WILLIAM CAVE, LESLIE RADMALL and CHRISTOPHER HENRY ELLIS, all British subjects, of 56, Gresham Street, London, E.C., do hereby declare the nature of this invention to be as follows:—

Our invention relates to loose-leaf binders or files, and has for its object to provide means to facilitate handling the contents thereof, which means obviate the present necessity of removing a number of the top papers before those that are wanted may be removed. Further, the said means may be incorporated in new binders or files or may be separately supplied to be fixed to existing articles.

In some letter files, especially those of book-like formation, special appliances of arch-shape are provided which are hingedly mounted upon a base plate attached to the back board of the book-like cover. These arch members are invariably spring controlled and normally coincide with the prongs which receive the perforated documents. The arch members are, by various known means, made to "lever" back from the prongs aforesaid, in order that the papers required may be removed. Prior to "levering" back the arch members the papers or documents on the top of those documents required are thrown round the bends on to the limbs of the said arch members.

Owing to the rigid nature of such appliances they cannot be used in that form in binders which are made of paper, cardboard or the like, and whose greatest capacity does not generally exceed one and a half inches.

To overcome this difficulty, we provide two arch members, each independently hingedly mounted on a base plate in such a manner that instead of being "levered" back by the known means and in the known manner applied to

those of the type of arch member referred to above, they are folded or swung outwards on their hinges and laid down when not in use within the stubs, if any, of the binding cover.

Devices of this nature may be conveniently provided and used in conjunction with the type of binder set forth in our Letters Patent No. 187,438; although with slight modifications such devices may be used in nearly all files or binders which employ bodkins or other collapsible binding members.

For use with our binding appliance as set forth in the above mentioned specification, the arch members, preferably of some springy material, such as brass wire, or the like, are mounted on a base plate which is secured to the back leaf or to the back proper of the binding cover with pins or the like. The edge of the base plate remote from the eye-letted perforations is bent to an acute angle with the said base plate, and nicks are provided in said edge opposite to the hinges of the arch members, so that when said latter are in the position of use, i.e., standing vertical, the limbs thereof snap therein.

When it is desired to use the arch members they are swung upon hinges into a vertical position, and inverted cones which are fixedly secured to the ends of the short limbs of the arch members, receive the bodkins and so temporarily construct, or rather constitute two runways on which papers may be guided, and swung over away from the papers or documents to be removed. To remove the wanted documents the inverted cones are taken off the tops of the bodkins, the documents required removed, and the unwanted documents swung back from off the limbs of the arch members on to the bodkins, thence to the resilient binding member proper,

[Price 1/-]

whereon they are held in known manner as set forth in the specification referred to.

The arch members are then released from the nicks, outwardly swung, and laid and retained beneath the acutely bent edge of the base plate.

In binders wherein the binding member consists of pliable tongues of brass or the like, the inverted cones are of flattened shape to more conveniently fit the said tongues, and in all cases the mere

modifying of the construction of the cones will serve to accommodate same to the binder in use.

Dated the 1st day of January, 1923.

KINGS PATENT AGENCY LIMITED,

By BENJ. T. KING,

Director,

Registered Patent Agent,

146A, Queen Victoria Street, London,

E.C. 4,

Agents for Applicants.

## COMPLETE SPECIFICATION.

### A New or Improved Letter File.

We, CUTHBERT WILLIAM CAVE, LESLIE RADMAILL and CHRISTOPHER HENRY ELLIS, all British subjects, of 56, Gresham Street, London, E.C. 2, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to letters or like files or loose leaf binders of the well-known type wherein the pair of binding elements, which pass through perforations in the leaves, are employed in conjunction with hinged arches whereby a top block of leaves may be moved (still in their assembled relation) over on to the arches so that an intermediate leaf can be detached from the binding elements when the arches have been moved away.

A common form of the above comprises spring-controlled arches co-acting with prong-like binding posts, the arch members being movable in their own plane, which is vertical, towards the cover of the file or the like. As mentioned above, prior to "levering" back the arch members, the papers or documents on the top of those required are thrown round the bends on to the vertical limbs of the arch members.

For their own particular uses, devices of the foregoing type have their advantages, and are substantial mechanical and rigid structures. The object of the present invention is to apply the arch principle to light paper, cardboard or the like files whose thickness is determined by the assembled papers and not by any structure of the file. That is to say, an empty file according to this invention is practically no thicker than the folded material of the cover, which dimension increases proportionately with

the addition of papers as obtains with plain folders.

In obtaining this result, the present invention makes use of light springy wire arch members which are pivoted to move in a plane lengthwise of the file, so that when not erected for their temporary use, they can be folded or swung down to lie flatly along the interior of the file back. Said arches are employed in combination with collapsible binding elements, that is to say pliable tangs, resiliently mounted bodkins, or equivalents, which can pass through the perforations or the like in the leaves and then lie flatly on top thereof. The thin wire arches are formed with enlarged hollow ends into which the binding members can be detachably fitted.

The use of hinged arched members disposed to collapse into the position along the cover described in the preceding paragraph is *per se* not new, but heretofore they have been used with prong like binding members, rigid and up-sanding when in use, thereby defeating the objects for which this invention is intended.

The binding means set forth in the Specification of our prior Patent No. 187,438 readily lends itself for adaptation to the present modification, and with slight modifications nearly all files or binders which employ bodkins or other collapsible binding members, may be so adapted.

In order that the invention may be more readily understood reference is directed to the accompanying drawings which show, in

Figure 1, the devices in position of use, with a document shown thrown round the bends of the limbs of the arch members, applicable for use with a file constructed in accordance with any of

the claims of prior Letters Patent No. 187,438, and in

Figure 2, the device is shown in a modified form applicable for use with 5 files or binders employing pliable metal tangs.

For use with our binding appliance as set forth in the above mentioned specification, see Figure 1, the arch 10 members 1, 1 of springy material, such as brass wire or the like, are mounted upon a base plate 2, which is secured to the back leaf or to the back proper of the binding cover 3 with pins 4 or the like. 15 The edge of the base plate 5 remote from the eyeletted perforations is bent to an acute angle with the said base plate, and nicks 6 are provided in said edge opposite to the hinges 7 of the arch members 1, 1, 20 so that when the latter are in the position of use, i.e. standing vertical, the limbs thereof snap therein.

When it is desired to use the arch members 1, 1, they are swung upon hinges 25 7 into a vertical position, ~~and inverted cones or caps 8, which are securely fixed to the ends of the short limbs of the arch members 1, 1, receive and frictionally~~ hold the bodkins 9 and so temporarily construct, or rather constitute two run- 30 ways on which papers may be guided, and swung over away from the papers or documents to be removed. To remove the wanted documents the inverted cones 35 or caps 8 are taken off the tops of the bodkins 9, the documents required removed, and the unwanted documents swung back from off the limbs of the arch members 1, 1, on to the bodkins 9, thence 40 to the resilient binding member proper, whereon they are held in known manner as set forth in the specification referred to.

The arch members 1, 1, are then 45 released from the nicks 6, outwardly swung, and laid and retained beneath the acutely bent edge 5 of the base plate 2.

In binders wherein the binding mem- 50 ber consists of liable tongues 10 of brass

or the like, see Figure 2, the inverted cones or caps 8 are flattened to more conveniently fit the said tongues 10, and in all cases the mere modifying of the construction of the cones or caps will serve 55 to accommodate same to the binder in use.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:— 60

1. In loose leaf files the combination of light springy wire arch members, pivoted to move in a plane lengthwise of the file so as to lie when out of use flatly 65 along the file back, with collapsible binding elements which are flexible, pliable or the like to pass through the leaves and then lie flatly on top thereof, substantially as described. 70

2. A loose leaf file according to Claim 1 characterised by the employment of a plate secured to the file and to which the arch members are hinged, an acutely bent edge to said plate having nicks to support said arches when erected in a perpendicular position, substantially as described. 75

3. Loose leaf files according to Claim 1 wherein the arch member therein defined is employed in conjunction with resiliently mounted bodkin binding means according to prior Patent No. 187,438, the ends of the bodkins respectively frictionally fitting hollow conical ends formed on the arch members, sub- 80 stantially as described. 85

4. A loose leaf file constructed and operating substantially as herein described and as illustrated in and by the accompanying drawings. 90

Dated the 9th day of October, 1923.

KINGS PATENT AGENCY LIMITED,

By BENJ. T. KING,

Director, 95

Registered Patent Agent,  
146A, Queen Victoria Street, E.C. 4,  
Agents for Applicants.

[This Drawing is a reproduction of the Original on a reduced scale.]

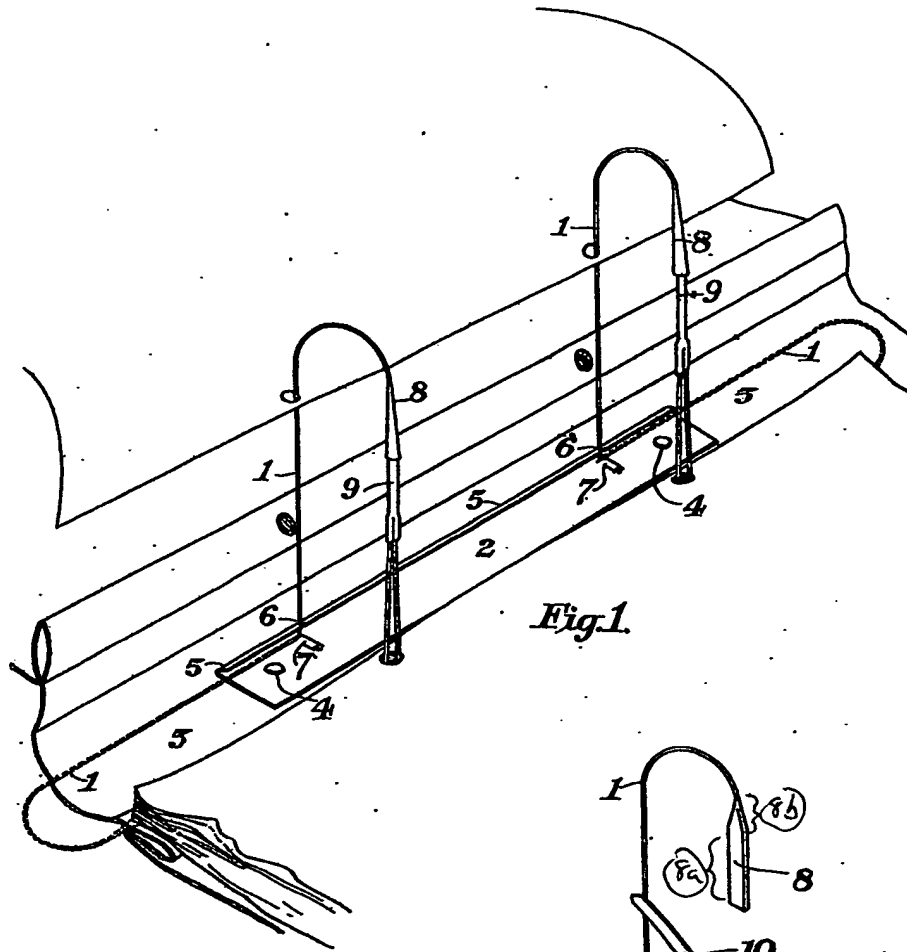


Fig. 1.

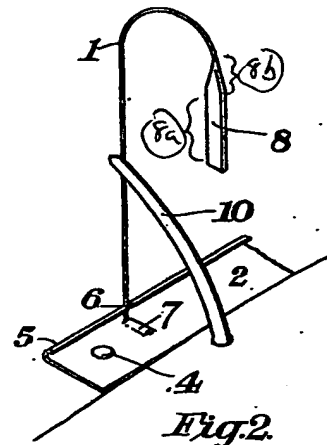


Fig. 2.

[This Drawing is a reproduction of the Original on a reduced scale]

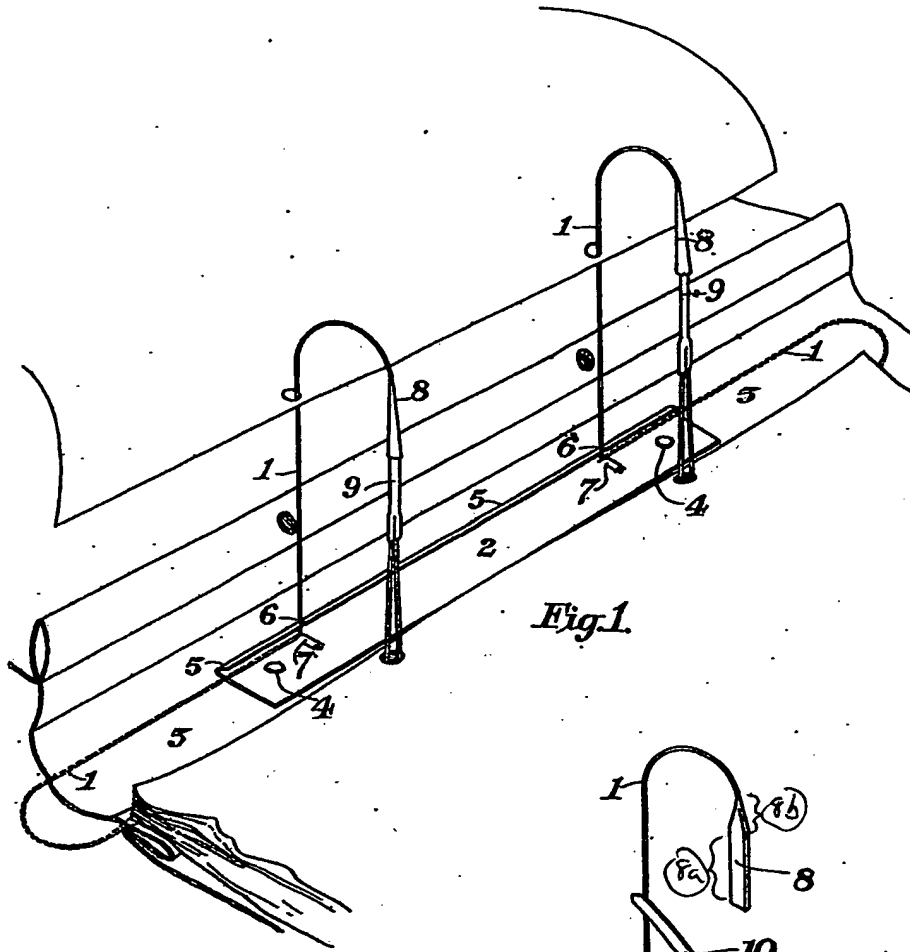


Fig. 1

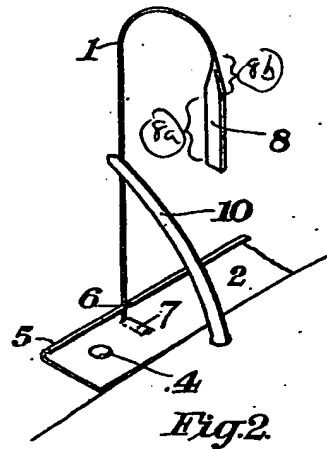


Fig. 2